

ATTACHMENT - CLAIMS LISTING

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A method for bending and tempering of a glass sheet, comprising the steps of:

heating the glass sheet in an oven to a bending temperature and moving the glass sheet with rotating rollers which support the glass sheet from below at a horizontal height level; and

after the glass sheet has reached the bending temperature, transferring the glass sheet at the horizontal height level with the rotating rollers into a bending section and allowing the glass sheet to bend on a special bending ring in the bending section, wherein said transferring step includes the steps of

moving the glass sheet horizontally with the rotating rollers at the horizontal height level by a transfer force exerted on the glass sheet,

directing air jets onto the top surface of the glass sheet so that the glass sheet is pressed down substantially at a location of a last one said rotating rollers in order to improve the transfer force of the last one of said rotating rollers,

terminating, when the glass sheet horizontally reaches the location of the bending ring, the supporting of the glass sheet by the rotating rollers at the horizontal height level,

supporting of the glass sheet at the horizontal height level by directing an air flow onto a bottom surface of the glass sheet after the termination of the support by the rotating rollers, said supporting step including the step of arranging various nozzles at a distance from the glass sheet whereby the directed air flow results from each nozzle producing a glass sheet supporting air jet, and

maintaining the horizontal height level of the glass sheet being supported by the directed air flow by a planar glass sheet elevation stop above the glass sheet at the location of the bending ring, said maintaining step including the step of blowing air through the elevation stop so that an air film is formed between the glass sheet and the glass sheet elevation stop, said blowing step preventing the glass sheet from elevating and touching of the glass sheet with the elevation stop.

2. (canceled)

3. (currently amended) The method according to the claim 13.2-characterized in that the nozzles can be lowered down ~~one-by-one~~ to a down position as a nozzle system.

4. (canceled)

5. (currently amended) The method according to the claim 1 characterized in that the glass elevation stop is a perforated plate or nozzle plate and air is blown through ~~the holes~~ therein, whereby the dynamic effect of this blowing is remarkably lower than the ~~blow~~-directed air flow on the bottom surface of the glass sheet.

6. (currently amended) The method according to the claim 1 characterized in that the glass sheet is moved over the bending ring by a transfer force provided by the ~~rotating rollers~~ and wherein support of the glass sheet gradually changes from rotating roller support to dynamic air flow support.

7. (previously presented) The method according to the claim 1 characterized in that the glass sheet is transferred over the bending ring by a wheel located in the area of the bending ring and under the glass sheet.

8. (canceled)

9. (currently amended) The method according to the claim 1 characterized in that the entrance and stopping of the glass sheet over the bending ring is assisted by mechanical stoppers, and ~~out of~~ using contact surfaces of the stoppers air is blown out against an edge of the glass sheet.

10. (withdrawn - currently amended) A glass sheet bending and tempering oven comprising:
a glass sheet heating section for heating up the glass sheet to a bending temperature;
a bending section;

a glass transfer mechanism including rotating rollers over which the glass sheet at the bending temperature is transferred at a horizontal height level into the bending section;

a bending ring located in the bending section on which the glass sheet is allowed to bend before tempering;

an air blowing system for transferring the glass sheet onto the bending ring, the air blowing system

being located under the glass sheet and at the location of the bending ring, and

supporting the glass sheet at the horizontal height level after termination of the support by the rotating rollers at the horizontal height level and maintaining the horizontal height level of the glass sheet during the transfer;

air jets directed onto a top surface of the glass sheet so that the glass sheet is pressed down substantially on the last one of said rotating rollers in order to improve a transfer effect of the last one of said rotating rollers;

an air blowing nozzle system located under the glass sheet at the location of the bending ring, said nozzles locating at a distance from the glass sheet and achieving the glass sheet supporting air jets, and

a planar glass sheet elevation stop located above the glass sheet at the location of the bending ring, wherein said stop includes an air blowing arrangement with a perforated plate or a set of nozzles arranged in planar form so that an air film is formed between the glass sheet and glass lifting stop to help maintain the glass sheet at the horizontal height level.

11. (currently amended - withdrawn) The ~~method~~ oven according to the claim 2-10 characterized in that the nozzles are arranged in a nozzle chamber which can be lowered to a down position.

12. (new - withdrawn) The oven according to the claim 10, characterized in that for transferring the glass sheet by the rollers, air jets are directed onto the top surface of the glass sheet, said jets pressing the glass sheet down substantially at a location of a last one of the rotating rollers in order to improve the transfer force of the last one of the rotating rollers.

13. (new) The method according to the claim 1, characterized in that for transferring the glass sheet by the rollers, air jets are directed onto the top surface of the glass sheet so that the glass sheet is pressed down substantially at a location of a last one of the rotating rollers in order to improve the transfer force of the last one of the rotating rollers.